Flight Procedure Tracking Form	Action: AMENDMENT	Task Type: IAP	Date Open: 04/24/2012	Task #: 2012042421509501001	Request #: 20120424215095
Procedure: RNAV (GPS) RWY 5 AMDT 3A		Airport ID: KMMU	Airport: MORRISTOWN MUNI		Reimbursable #:
City: MORRISTOWN	ST: NJ	GPS #:		Estimated Chart Date: ~~10/18/2012~~ 9/20/12	FICO #:
Fac ID:	Fac. Type:		Specialist: PETER GUIMOND		

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:				
QA:	5/21 cc			5/29 5/30 QUALITY CHECKED
Liaison:				

Procedure Comments: NON ENROUTE

Remark Type: INFORMATION

ATTACHED FORMS: 8260-3; 8260-10; 8260-9
8260-2: HOSBE, NJ-REV 1
CONTACT: DON SMITH, AJV-352 LEAD, 405.954.1036

FIG NA

JUN 12 2012

FAB PACK SA. SRC

DRI SAVED

MORRISTOWN, NEW JERSEY

AL-931 (FAA)

NEW

PRE-FIG

RNAV (GPS) RWY 5

MORRISTOWN MUNI (MMU)

WAAS	APP CRS	Rwy Idg	5998
CH 97720	049°	THRE	182
W05A		Apt Elev	187

Circling to Rwy 13-31 NA at night. VDP and Baro-VNAV NA when using Newark altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Newark altimeter setting: increase LPV DA to 870 feet and all Cats visibility ⅛ mile; increase LNAV/VNAV DA to 948 feet and all Cats visibility ¼ mile; increase all MDA 60 feet and LNAV Cats C/D visibility ⅛ mile and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2000 direct MIKEF and hold.

ATIS	NEW YORK APP CON	MORRISTOWN TOWER*	GND CON	CLNC DEL
124.25	127.6 379.9	118.1 (CTAF) 353.9	121.7	128.6

PROTOTYPE-NOT FOR NAVIGATION

STILLWATER STW

(159°T) 3000 172° (20.8)

MIKEF

(036°T) 049° 229° (216°T) 4 NM

1302 940 1060 1400 1047 1464 1280 1265 1462 446 438 436 659 470± 560 548 RW05 684 988 923 609± 354 447 395

SBJ 4034.983N/07444.508W
STW 4059.749N/07452.142W
HOSBE 4044.194N/07428.406W
KWITE 4038.655N/07433.700W
MIKEF 4053.244N/07419.717W
ZELEN 4040.226N/07442.549W
RW05 4047.586N/07425.155W

(FAF) HOSBE

(IAF) ZELEN (103°T) 2000 116° (6.9)

(036°T) 1800 049° (6.8)

(IF) KWITE

(IAF) SOLBERG SBJ (066°T) 2000 079° (9)

MSA RW05 25 NM 2900

Procedure NA for arrivals on SBJ VOR/DME airway radials 028 CW 147.

ELEV 187 THRE 182

KWITE 2000 (036°T) 049° HOSBE 1800 *1.7 NM to RW05 *LNAV only RW05 1800

2000 MIKEF

GS 3.50° TCH 59

6.8 NM 2.5 NM 1.7 NM

CATEGORY	A	B	C	D
LPV DA	816-1⅞ 634 (700-1⅞)			NA
LNAV/VNAV DA	894-2¼ 712 (800-2¼)			NA
LNAV MDA	860-1 678 (700-1)		860-1⅞ 678 (700-1⅞)	
CIRCLING	900-1 713 (800-1)		900-2 713 (800-2)	1000-2¾ 813 (900-2¾)

049° to RW05

REIL Rwys 5 and 31 L
HIRL Rwy 5-23 L
MIRL Rwy 13-31 L

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
STW VOR/DME	ZELEN (FB)	172.48 / 20.83	3000
ZELEN (IAF)	KWITE (FB)	116.08 / 6.92	2000
SBJ VOR/DME (IAF)	KWITE (FB)	078.91 / 9.01	2000
KWITE (IF)	HOSBE (FB)	049.01 / 6.84	1800
HOSBE (FAF)	RW05 (FO)	049.07 / 4.20	
RW05 (MAP)	587 MSL	049.07	
587 MSL	MIKEF (FO)		2000

MISSED APPROACH

LPV: DA
LNAV/VNAV: DA
LNAV: RW05

CLIMB TO 2000 DIRECT MIKEF AND HOLD.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT KWITE
3. FAC: 049.07 FAF: HOSBE DIST FAF TO MAP: 4.20 THLD: 4.20
4. MIN. ALT: KWITE 2000, HOSBE 1800
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 1800 GS ALT AT: HOSBE 1800 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.50 TCH: 59.0 34:1 IS NOT CLEAR
8. MSA FROM: RW05 2900

ADDITIONAL FLIGHT DATA:
HOLD SW, RT, 049.10 INBOUND.
CHART FAS OBST: 548 MNMT 404646N/0742623W
CHART FAS OBST: 609 TREE 404553N/0742739W
DISTANCE TO THLD FROM 634 HATH: 1.54 NM.
CHART VDP AT 1.67 MILES TO RW05*
*LNAV ONLY.
WAAS CHANNEL # 97720
REFERENCE PATH ID: W05A
LTP HAE: 22.6 M

MAG VAR: 13W EPOCH YEAR: 2005

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT | ALTERNATE: N A | STANDARD @

CATEGORY =====>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LPV DA	816	1 7/8	634	816	1 7/8	634	816	1 7/8	634		NA				
LNAV/VNAV DA	894	2 1/4	712	894	2 1/4	712	894	2 1/4	712		NA				
LNAV MDA	860	1	678	860	1	678	860	1 7/8	678	860	1 7/8	678			
CIRCLING	900	1	713	900	1	713	900	2	713	1000	2 3/4	813			

NOTES:
CHART NOTE: CIRCLING TO RWY 13-31 NA AT NIGHT.
CHART NOTE: VDP AND BARO-VNAV NA WHEN USING NEWARK ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F).
CHART NOTE: DME/DME RNP-0.3 NA.
(SEE FORM 8260-10)

@ CAT D 900-2 3/4
@ NA WHEN LOCAL WEATHER NOT AVAILABLE

CITY AND STATE	ELEVATION: 187 THRE: 182 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
MORRISTOWN, NJ	MORRISTOWN MUNI	RNAV	RNAV (GPS) RWY 5, AMDT 3A	AMDT: 3
				DATED 02/09/2012

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		**ROUTINE**

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[X]	[ ]	[X]	[ ]	[X]	[X]	[X] **N90, MMU ATCT, ZNY, APT MGR**

FLIGHT CHECKED BY

NAME:	FIFO	DATE:
GREGORY JOHN MARINO	**FIOG**	**12/20/2011**

DEVELOPED BY

NAME:	FIFO	DATE:
PETER R. GUIMOND	**AJV-352**	**05/18/2012**

APPROVED BY

NAME:	FIFO	DATE:
DARRYEL ADAMS	**AJV-352**	

CHANGES:

1. REPLACED ALL INSTANCES OF BUGII WITH HOSBE
2. DELETED NOTE: WHEN LOCAL ALTIMETER NOT RECEIVED, USE NEWARK ALTIMETER SETTING AND INCREASE ALL DA 54 FEET AND ALL MDA 60 FEET; INCREASE LPV ALL CATS VISIBILITY 1/8 MILE, LNAV/VNAV ALL CATS VISIBILITY 1/4 MILE, LNAV CATS C AND D VISIBILITY 1/8 MILE, AND CIRCLING CAT C VISIBILITY 1/4 MILE.
3. ADDED NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE NEWARK ALTIMETER SETTING: INCREASE LPV DA TO 870 FEET AND ALL CATS VISIBILITY 1/8 MILE; INCREASE LNAV/VNAV DA TO 948 FEET AND ALL CATS VISIBILITY 1/4 MILE; INCREASE ALL MDA 60 FEET AND LNAV CATS C/D VISIBILITY 1/8 MILE AND CIRCLING CAT C VISIBILITY 1/4 MILE.
4. ADDED NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F).
5. ADDED NOTE: VDP AND BARO-VNAV NA WHEN USING NEWARK ALTIMETER SETTING.
6. ADDED VDP 1.67 FROM RWY 05 THRESHOLD.
7. UPDATED MISSED APPROACH ALTITUDE IN TERMINAL ROUTES FROM 3000 TO 2000.
8. ADDED LNAV/VNAV FINAL CONTROLLING OBSTACLE TO ADDITIONAL FLIGHT DATA.

REASONS:

1. EASTERN FPT REQUEST.
2. REPLACED BY NEW BACK-UP ALTIMETER NOTE.
3. FORMATTED IAW CURRENT DOCUMENTATION POLICY.
4. IAW FAAO 8260.19.
5. IAW FAAO 8260.19.
6. TERPS PARA 251, 20:1 SURFACE IS NOW CLEAR.
7. CORRECTED TYPO.
8. IAW FAAO 8260.19.

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above aiport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

NOTES, (CONT.):
CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON SBJ VOR/DME AIRWAY RADIALS 028 CW 147.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE NEWARK ALTIMETER SETTING: INCREASE LPV DA TO 870 FEET AND ALL CATS VISIBILITY 1/8 MILE; INCREASE LNAV/VNAV DA TO 948 FEET AND ALL CATS VISIBILITY 1/4 MILE; INCREASE ALL MDA 60 FEET AND LNAV CATS C/D VISIBILITY 1/8 MILE AND CIRCLING CAT C VISIBILITY 1/4 MILE.

CITY AND STATE	ELEVATION: 187 THRE: 182	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
MORRISTOWN, NJ	AIRPORT NAME: MORRISTOWN MUNI	RNAV	RNAV (GPS) RWY 5, AMDT 3A	AMDT: 3
				DATED: 02/09/2012

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

WHITEOUT CORRECTIONS
1. TERMINAL ROUTES: (FAF) ADDED ADJACENT HOSBE; (MAP) REMOVED FROM RW05 IN TO SECTION; 049.07 COURSE ADDED TO CA LEG; MISSED APPROACH ALTITUDE CHANGED TO 2000.
2. RNP VALUE OF 020 REMOVED FROM LINE SEQUENCE 060 ON AIRINC PAGE 4 AND ON FLIGHT CHECK SUMMARY PAGE.
3. ADDED B/U ALTIMETER ADJUSTMENT TO BLOCK 3 ON DASH 9.
4. REMOVED NA FROM LINE 1 (PT).

QUALITY 2 CHECKED

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above aiport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMMU
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	404735.1745N
LTP/FTP LONGITUDE	0742509.2715W
LTP/FTP ELLIPSOIDAL HEIGHT	+00226
FPAP LATITUDE	404847.2000N
FPAP LONGITUDE	0742400.1300W
THRESHOLD CROSSING HEIGHT (TCH)	00059.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.50
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0920
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	879A004D

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00554
FPAP ORTHOMETRIC HEIGHT	+00554

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 187 THRE: 182 / AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
MORRISTOWN, NJ	MORRISTOWN MUNI	RNAV	RNAV (GPS) RWY 5, AMDT 3A	AMDT: 3
				DATED: 02/09/2012

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

QUALITY CHECKED

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

ARINC PACKET - 424-18 - RNAV (GPS)

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        SBJ   K6011290VDLA N40345896W074443046    N40345896W074443046W0100001891     NARSOLBERG
        SUSAD        STW   K6010960VDL  N40594495W074520851    N40594495W074520851W0110009201     NARSTILLWATER

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   HOSBE K60    W     N40441162W074282437                    W0128     NAR           HOSBE
        SUSAEAENRT   KWITE K60    W     N40383930W074334198                    W0127     NAR           KWITE
        SUSAEAENRT   MIKEF K60    W     N40531461W074194299                    W0129     NAR           MIKEF
        SUSAEAENRT   ZELEN K60    W     N40401358W074423296                    W0127     NAR           ZELEN

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMMUK6AMMU     0     059YHN40475760W074245360W013000187         1800018000C    MNAR    MORRISTOWN MUNI

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMMUK6FR05   ASBJ   010SBJ  K6D 0V  A    IF                                          18000                A JS
        SUSAP KMMUK6FR05   ASBJ   020KWITEK6EA0EE B 010TF                    07890090    + 02000                      A JS
        SUSAP KMMUK6FR05   ASTW   010STW  K6D 0V       IF                                          18000                A JS
        SUSAP KMMUK6FR05   ASTW   020ZELENK6EA0E  A 020TF                    17250208    + 03000                      A JS
        SUSAP KMMUK6FR05   ASTW   030KWITEK6EA0EE B 010TF                    11610069    + 02000                      A JS
        SUSAP KMMUK6FR05   R      010KWITEK6EA0E  I    IF                                + 02000     18000            A JS
        SUSAP KMMUK6FR05   R      020HOSBEK6EA1E  F 051TF                    04900068    + 01800                RW05  K6PGA JS
        SUSAP KMMUK6FR05   R      020HOSBEK6EA2WALPV       ALNAV/VNAV ALNAV                                           JS
        SUSAP KMMUK6FR05   R      030RW05 K6PG0GY M 031TF                    04910042      00241          -350         A JS
        SUSAP KMMUK6FR05   R      040         0  M     CA                    0491        + 00587                      A JS
        SUSAP KMMUK6FR05   R      050MIKEFK6EA0EY      DF                                + 02000                      A JS
        SUSAP KMMUK6FR05   R      060MIKEFK6EA0EE  R   HM                    04910040    + 02000                      A JS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMMUK6GRW05    0059980491 N40473517W074250927+0000    +00226001820000059150R

                 1         2         3         4         5         6         7         8         9         0         1         2         3
PP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMMUK6PR05   RW05 001 0000W05A0N4047351745W07425092715+002260350N4048472000W074240013001067509200005 90F400500879A004D
```

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 187 THRE: 182	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
MORRISTOWN, NJ	AIRPORT NAME: **MORRISTOWN MUNI**	**RNAV**	**RNAV (GPS) RWY 5, AMDT 3A**	AMDT: **3**
				DATED: **02/09/2012**

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER ☐ (specify) _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

```
        SUSAP KMMUK6PR05   RW05 002E      +00554+00554LPV       97720

                 1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMMUK6SRW05 K6PG                0   18018002925                                                                          M
```

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 187 THRE: 182	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
MORRISTOWN, NJ	AIRPORT NAME: MORRISTOWN MUNI	RNAV	RNAV (GPS) RWY 5, AMDT 3A	AMDT: 3
				DATED: 02/09/2012

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

ARINC SUMMARY - 424-18 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	SBJ	SBJ	010	IAF	IF		FB					
	SBJ	KWITE	020		TF		FB	1.0	078.9(065.9T)	009.0	AA 02000	
	STW	STW	010		IF		FB					
	STW	ZELEN	020	IAF	TF		FB	2.0	172.5(159.5T)	020.8	AA 03000	
	STW	KWITE	030		TF		FB	1.0	116.1(103.1T)	006.9	AA 02000	
		KWITE	010	FACF	IF		FB				AA 02000	
		HOSBE	020	FAF	TF		FB	0.5	049.0(036.0T)	006.8	AA 01800	
		RW05	030	MAP	TF		FO	0.3	049.1(036.1T)	004.2	AT 00241	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		049.1(036.1T)		AA 00587	
	MIKEF	050		DF		FO				AA 02000	
	MIKEF	060		HM	R	FO		049.1(036.1T)	004.0	AA 02000	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	SBJ	N403458.96	W0744430.46	N4034.983	W07444.508
	STW	N405944.95	W0745208.51	N4059.749	W07452.142
	HOSBE	N404411.62	W0742824.37	N4044.194	W07428.406
	KWITE	N403839.30	W0743341.98	N4038.655	W07433.700
	MIKEF	N405314.61	W0741942.99	N4053.244	W07419.717
	ZELEN	N404013.58	W0744232.96	N4040.226	W07442.549
	RW05	N404735.17	W0742509.27	N4047.586	W07425.155

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW05	00182	59

CITY AND STATE	ELEVATION: **187** **THRE: 182**	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
MORRISTOWN, NJ	AIRPORT NAME: **MORRISTOWN MUNI**	**RNAV**	**RNAV (GPS) RWY 5, AMDT 3A**	AMDT: **3**
				DATED: **02/09/2012**

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER ☐ (specify) _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FEEDER	STW VOR/DME	ZELEN	1. AAO	405230.00N/0744554.00W	1510 (4E)	1000	AT490	3000
			2. TERRAIN	405230.00N/0744554.00W	1310 (1300)		AS1000	2300
INITIAL	ZELEN	KWITE	3. AAO	403703.00N/0743439.00W	873 (4E)	1000	AT127	2000
			4. TERRAIN	403703.00N/0743439.00W	673 (700)		AS1000	1700
INITIAL	SBJ VOR/DME	KWITE	5. TOWER (34-001003)	403641.00N/0743411.00W	920 (5E)	1000		2000
			6. TERRAIN	403703.00N/0743439.00W	672 (700)		AS1000	1700
INTERMEDIATE	KWITE	HOSBE	7. AAO	403648.00N/0743409.00W	804 (4E)	500	AC98 AT398	1800
			8. TERRAIN	403718.00N/0743230.00W	539 (500)		AS1000	1500
FINAL: LPV	HOSBE	RW05	9. TREE (34-020802)	404645.56N/0742606.60W	491 (1A)	29.14:1	MA13	816/634
FINAL: LNAV/VNAV	HOSBE	RW05	10. MNMT (34-000716)	404646.00N/0742623.00W	548 (1B)	20.09:1	AC10	894/712
FINAL: LNAV	HOSBE	RW05	11. TREE	404553.48N/0742739.07W	609 (2C)	250		860
2. PROCEDURE TURN	NA							
3. MISSED APPROACH MAP:	DA / DA / RW05	MIKEF	9. TREE (34-020802)	404645.56N/0742606.60W	491 (1A)	ASC		2000
			12. AAO	405424.00N/0742033.00W	695 (4E)	1000		1700
ELEV:	447/744/760		13. TERRAIN	405424.00N/0742033.00W	495 (500)		AS1500	2000

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL		OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
CATEGORY A	1.3 NM	350	713		14. TREE	404749.28N/0742633.38W	589 (2C)	300		900
CATEGORY B	1.5 NM	450	713		14. TREE	404749.28N/0742633.38W	589 (2C)	300		900
CATEGORY C	1.7 NM	450	713		14. TREE	404749.28N/0742633.38W	589 (2C)	300		900
CATEGORY D	2.3 NM	550	813		15. TWR (34-000026)	404751.00N/0742136.00W	684 (2A)	300		1000
CATEGORY E	4.5 NM	550								

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: **RW05**

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	TWR (36-000266)	020/ 25.1	1807 (1A)	2900					

QUALITY CHECKED

CITY AND STATE	ELEVATION: 187 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
MORRISTOWN, NJ	MORRISTOWN MUNI	RNAV	RNAV (GPS) RWY 5, AMDT 3A	AEA

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
NY TRACON MMU TOWER ZNY ARTCC	[ ] NWS OTHER: AWOS-3 [ ] FAA [ ] A/C	SOURCE: KMMU / KEWR DISTANCE: 0 / 12.93 HOURS REMOTE OPERATION:
SATISFACTORY ON:		
[X] VHF [X] UHF [ ] HF	LOCATION: KMMU	ADJUSTMENT: 0 / 53.39

4. MONITOR STATUS

PRIMARY NAVAID:

MONITOR POINT:

HRS OPTN: CAT 1 / CAT 3

5. APPROACH & RUNWAY LIGHTING

[ ]	ALS
[ ]	(S) SALS
[X]	MALSR 23 (PCL)
[X]	HIRL 05 (PCL), 23 (PCL)
[X]	MIRL 31 (PCL), 13 (PCL)
[X]	REIL 05 (PCL), 31 (PCL)
[ ]	TDZ
[ ]	C/LINE
[X]	OTHER (SPECIFY) PAPI-2L 31 (PCL)

6. RUNWAY MARKINGS

BASIC BSC-G 31, 13

ALL WEATHER PIR-G 05, 23

INSTRUMENT

7. RUNWAY VISUAL RANGE

APPROACH

MIDFIELD

ROLL OUT

8. GLIDE PATH

GP ANGLE: 3.50 | ELEV RWY THRESHOLD: 181.9

DISTANCE FROM RWY: | ELEV GP ANTENNA:

THRESHOLD CROSSING HEIGHT: 59.0

9. FINAL APPROACH COURSE AIMING

[X] RUNWAY THRESHOLD FT. FROM THRESHOLD

[X] ON CENTERLINE FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: PETER R. GUIMOND

DATE: 05/18/2012

TITLE: AERONAUTICAL INFORMATION SPECIALIST

OFFICE: AJV-352

PART C - REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

2. KMMU AWOS ON SERVICE A. KEWR ASOS ON SERVICE A.
3. KEWR 24-HR BACK-UP.
5. RWY NOT EQUIPPED WITH VGSI.

NO ADDITIONAL AIRSPACE REQUIRED.

TAA NOT ESTABLISHED PER ATC REQUEST.

150 FOOT TREES USED PER EASTERN FPT.

GLIDEPATH 3.50 DEGREES/TCH 59 FEET ORIGINALLY USED TO MITIGATE GQS PENETRATION: 205 MSL TREE (34-020775) 404733.08N/0742513.38W. THIS OBSTACLE HAS BEEN REMOVED, HOWEVER, CURRENT GLIDEPATH/TCH WILL BE RETAINED FOR THIS MINOR AMENDMENT.

LPV OCS SURFACE = 29.14:1

LNAV/VNAV STANDARD ISA DEVIATION -30C. HISTORICAL TEMPERATURE DATA NOT AVAILABLE.
LNAV/VNAV OCS SURFACE = 20.09:1

ATC DESIRED MISSED APPROACH TO CLIMB STRAIGHT AHEAD TO 2000 SO CONTROLLERS COULD RADAR VECTOR FOR ANOTHER APPROACH. MISSED APPROACH HOLDING LIES IN 2000 MVA SECTOR.

LPV AND LNAV/VNAV CAT D NA DUE TO EXCEEDING MAXIMUM ALLOWABLE GLIDEPATH ANGLE IAW 8260.54A TABLE 2-4.

ZELEN AND SBJ VOR/DME INTERMEDIATE SEGMENTS HAVE DIFFERENT CONTROLLING OBSTACLES. INTERMEDIATE OBSTACLE ATTACHED TO ZELEN DOCUMENTED AS WORST CASE.

RASS (PRESSURE PATTERNS ARE THE SAME):
KMMU 185.5, KEWR 17.6
RA = 53.39
RASS ROUNDED UP TO 54 FEET FOR ALL DA AND 60 FEET FOR ALL MDA AND PUBLISHED AS A NOTE.

THE FOLLOWING RWY 5, 20:1 PENETRATIONS HAVE BEEN REMOVED PER EASTERN FPT (ORS TEAM NOTIFIED BY EMAIL ON 5/14/12):
207 TREE (34-020772) 404729.56N/0742511.02W
272 TREE (34-020781) 404717.92N/0742517.64W
205 TREE (34-020775) 404733.08N-0742513.38W
271 TREE (34-020783) 404719.56N-0742517.78W
244 TREE (34-020776) 404733.60N-0742517.18W

TERPS, VOLUME 1, VISUAL PORTION OF FINAL PENETRATIONS:
(EASTERN FPT NOTIFIED 4/23/12)
R05 34:1 PENETRATIONS:
482 TREE (34-020793) 404651.40N/0742610.11W (119.69)
491 TREE (34-020802) 404645.56N/0742606.60W (119.33)
468 TANK (34000664) 404645.00N/0742607.00W (94.45)
477 BLDG (34-020796) 404644.65N/0742618.39W (87.43)
488 TREE (34-020081) 404618.29N/0742604.62W (53.39)
391 TREE (34-020791) 404651.30N/0742554.44W (49.33)
381 BLDG (34-020792) 404654.10N/0742556.73W (43.01)
486 TREE (34-020800) 404614.67N/0742604.49W (42.86)
278 TREE (34-020788) 404720.79N/0742531.20W (38.19)
275 TREE (34-020784) 404716.85N/0742526.08W (32.54)
462 TREE (34-020794) 404632.35N/0742632.94W (22.47)
282 BLDG (34-000825) 404704.00N/0742530.00W (3.42)

CONTINUED

QUALITY 2 CHECKED

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
3. MISSED APPROACH MAP:								
ELEV:								

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.	
		REQUIRED	ACTUAL
CATEGORY A	1.3 NM	350	
CATEGORY B	1.5 NM	450	
CATEGORY C	1.7 NM	450	
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES

PRIMARY NAVAID:

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A

QUALITY CHECKED

CITY AND STATE	ELEVATION: 187 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
MORRISTOWN, NJ	MORRISTOWN MUNI	RNAV	RNAV (GPS) RWY 5, AMDT 3A	AEA

FAA Form 8260 - 9 / April 2006 (Computer Generated)

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
SATISFACTORY ON:	☐ NWS ☐ FAA ☐ A/C OTHER:	SOURCE:
		DISTANCE:
		HOURS REMOTE OPERATION:
☐ VHF ☐ UHF ☐ HF	LOCATION:	ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	

5. APPROACH & RUNWAY LIGHTING	☐	ALS
	☐	(S) SALS
	☐	MALS
	☐	HIRL
	☐	MIRL
	☐	REIL
	☐	TDZ
	☐	C/LINE
	☐	OTHER (SPECIFY)

6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:

9. FINAL APPROACH COURSE AIMING	☐	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	☐	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:

CONTINUED.

R13 20:1 PENETRATIONS:
329 TREE (34-020693) 404814.53N/0742604.23W (3.56)
340 TREE (34-020694) 404815.67N/0742600.44W (25.54)
351 TREE (34-020695) 404818.50N/0742600.75W (29.65)
296 TREE (34-020696) 404812.00N/0742545.16W (42.75)
218 TREE (34-020709) 404805.43N/0742535.07W (13.68)
197 BUSH (34-020720) 404802.74N/0742531.56W (10.53)
318 TREE (34-020723) 404810.42N/0742557.45W (24.81)

R31 20:1 PENETRATIONS:
192 BUSH (34-020739) 404745.31N-0742437.28W (4.09)
252 TREE (34-020765) 404737.30N-0742423.88W (0.57)

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: HOSBE **STATE:** NJ **COUNTRY:** US

LATITUDE/LONGITUDE: 404411.62N/0742824.37W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
NAME CHANGED FROM BUGII TO HOSBE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 5			KMMU	MORRISTOWN	NJ (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 10/18/2012

REASON FOR REVISION:
CHANGED NAME FROM BUGII TO HOSBE.

DEVELOPED BY: **DATE:** 05/16/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZNY
ATC FACILITY: N90, MMU ATCT
OTHER:

QUALITY 2 CHECKED